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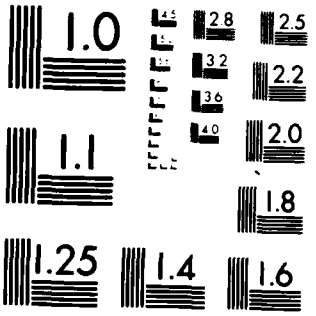

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Final Report on ONR Contract
N00014-78-G-0032 Ref NR 061-256
1 Oct. 1978 - 30 Sept. 1981

P. Bradshaw*,
I.M.M.A. Shabaka†, and R.D. Mehta†.

Abstract

This report presents the results of mean and fluctuating velocity measurements in three types of longitudinal vortex imbedded in turbulent boundary layers in nominally-zero pressure gradients. Vortex generators were installed upstream of the wind tunnel contraction, so that the vortices entering the working section did not have large associated total-pressure wakes.

Measurements include all three components of mean velocity, all second- and third-order (and a few fourth-order) mean products of fluctuating velocities, and surface shear stress, all for at least two streamwise positions for each configuration. Temperature-conditioned sampling measurements, and some flow visualization results, were also acquired.

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* Principal Investigator

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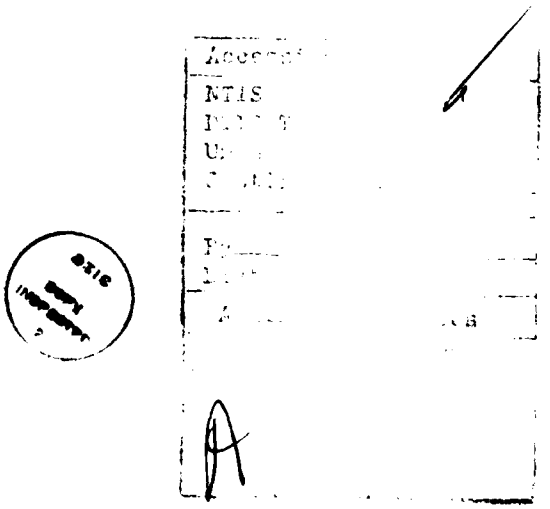

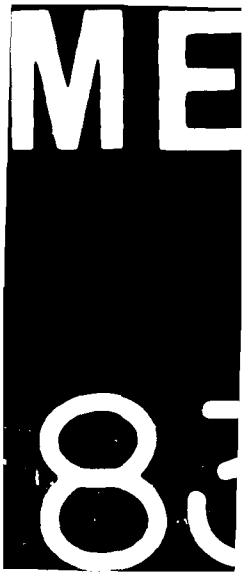
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